

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

2,09
1936 DESCRIPTIVE PRICE LIST

HOWARD E. GATES

FAMOUS CACTUS GARDENS

119 South Illinois Street

Anaheim, California, U. S. A.

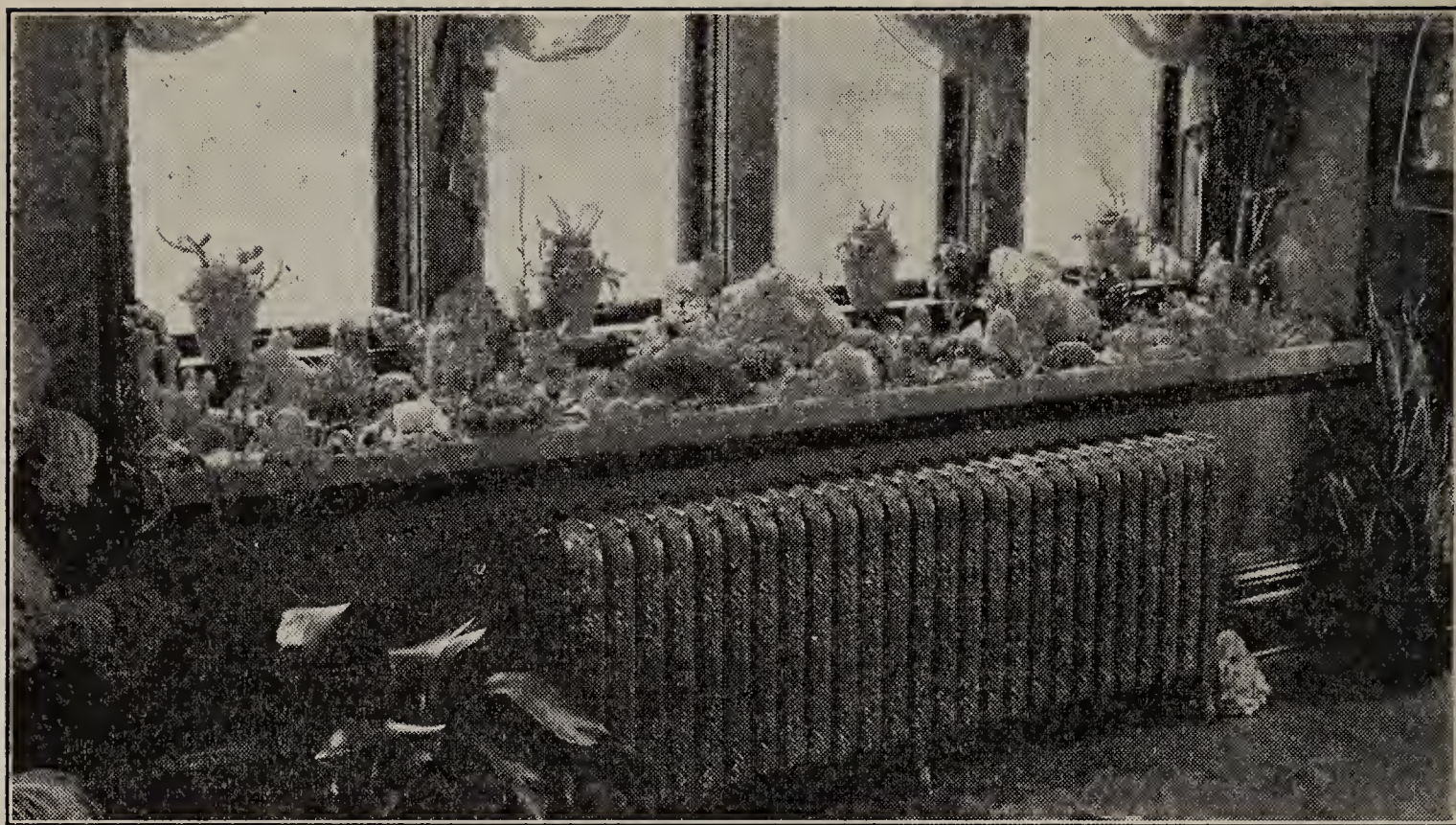
VISITORS WELCOME

CLOSED SUNDAYS



COLLECTION OF ECHINOPSIS PLANTS
with one Aloe variegata in right foreground

First prize cactus picture entered by S. R. Behler, Kansas



Second Prize Window Garden Picture, Mrs. J. C. Danielson, Iowa

TERMS

It is a great pleasure to issue this 1936 Catalogue listing a greater variety of choice plants than ever before and at lower prices. Many of these plants are our own discoveries from our many exploring trips in Lower California, Mexico. Some of them cannot be purchased from any other dealer. We believe our plants are correctly named as we take great pride in proper labelling and label all plants we ship. This year we have followed Backeberg's Generic Outline as given in his Kakteen Index for 1936. We think this is the best revision of Britton & Rose's Generic Outline.

We do not consider such terms as "two year old seedling, etc." mean anything at all because of the great variations in the rate of growth from one sowing of seed and varying abilities of growers. We have endeavored to indicate the approximate minimum size and exact delivered cost of each item. In case of serious deficiencies in size an ample allowance will be made as we hope to treat our customers better than they expect. All are strong, healthy plants grown in our bright, favorable climate without artificial heat. This means our plants will grow. The following signs and abbreviations are used in the listings: in. for inch (equal to about 2½ centimeters) RC for rooted cuttings, P for plants, S for seedlings. The size quoted means either height or diameter, whichever is greater, exclusive of spines. We have many other fine kinds in small quantities. We will gladly answer inquiries concerning particular kinds.

FREE DELIVERY

Prices include careful packing in suitable containers and free delivery on all orders amounting to \$1.00 or more. On smaller orders please add 15c. CALIFORNIA CLIENTS ONLY must add 3% sales tax to comply with the State Law. We cannot be responsible for the non-receipt of stamps, coins or currency.

WARRANTY

All shipments are warranted to be healthy and able to pass any horticultural inspection. Safe delivery to any point in the United States is guaranteed. Our responsibility ceases when plants are delivered in good condition.

CANADIAN SHIPMENTS

Prices include delivery to Canadian points. Orders from Canada must be accompanied by Canadian Government importation permits. These may be obtained free on application to The Secretary, Destructive Insect and Pest Advisory Board, Department of Agriculture, Ottawa.

FOREIGN DELIVERIES

Prices include carriage costs to Great Britain, New Zealand, Australia, Japan and all other countries to which the charges do not exceed 20c per pound. Customs duties are not included. Loss of plants in transit is at customer's risk except in the case of rejection by proper Horticultural Authorities on account of diseases and pests. Foreign clients should advise us of any special importation permit, special customs papers or health certificates required by their respective governments, in order to avoid loss.

LARGE GROWING CEREUS

Here we present many varieties of the large cactus from North and South America, where in many sections, they form prominent features of the landscape. Among them are the great tree cactus and large columnar types. In the mildest sections of our country they will quickly grow into spectacular garden plants. All of them are fine for pot-growing as with less root room they grow more slowly.

Acanthocereus. A group of medium to large plants with sprawling, angular branches and large white night blooming flowers.

A. honduriensis. A very fast growing large plant with three to five angled, glossy green branches bearing small clusters of short stiff spines. A rarity. RC from seedlings..... 25c

A. pentagonus. A three to six angled, bright green plant of medium size. A favorite in many sections as a grafting stock. RC..... 25, 35c

Carnegiea gigantea. The Arizona Giant or Suwarro. A very large but slow growing columnar cactus. Will not blossom in the house.....2 in. S 25c

Cephalocereus. The Old Men cactus are a group of large beautiful columnar types which are very satisfactory as pot plants, but will not bloom in the house.

Ceph. alensis. An attractive large growing plant that bears dense long wool on one side when old..... $\frac{1}{2}$ in. S 50c

Ceph. senilis. The most famous Old Man cactus of Mexico. Columnar, hidden by long white hair.....1 $\frac{1}{2}$ in. S 35c

Cleistocactus. A fine South American group resembling *Nyctocereus* in habit of growth. Slender tubed, red flowers may appear on old plants.

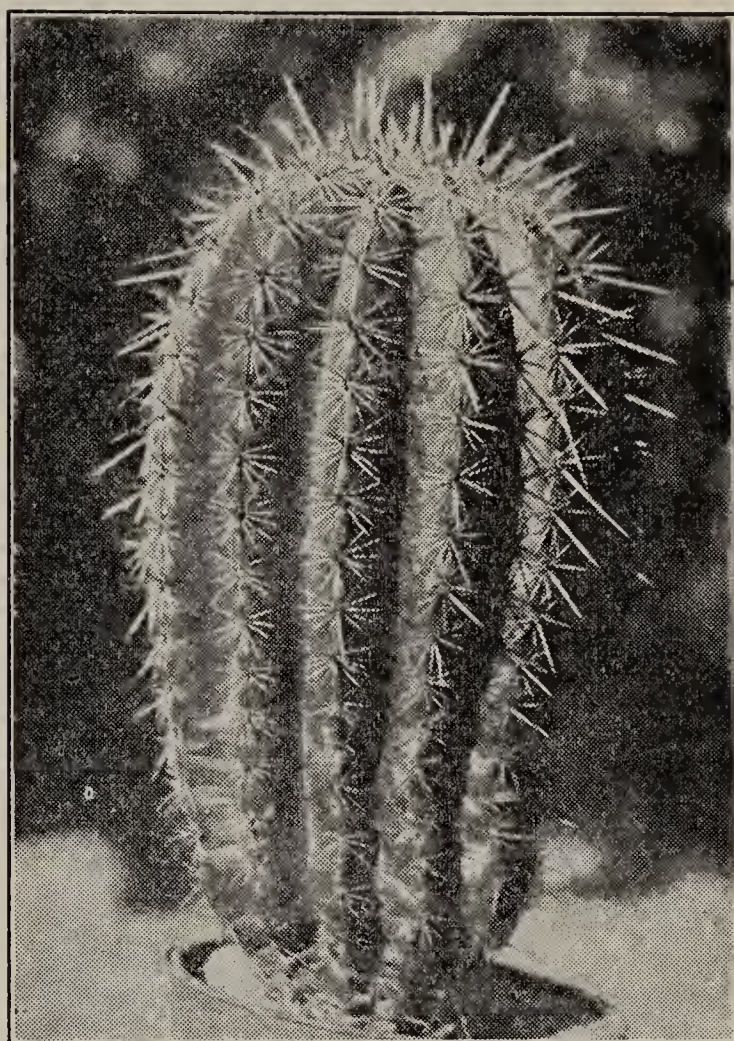
Cleisto. baumannii. Forms clumps of rather slender branches bearing closely set golden brown spines.....2 in. RC 25c, large RC 35c

Cleisto. buchtienii. A new small tree like *Cereus* from Bolivia with yellow spines.....3 in. RC 50c

Cleisto. strausii. (*Pilocereus*. *Borzicactus*). The Silver Torch Cactus. A beautiful, clustering, slender columned plant covered with soft white spines. Easily grown.....3 in. RC 35c, 5 in. RC 50c

Corryocactus. Another fine South American group forming slender columnar branches from the base. Bright colored day blooming flowers may be expected on old plants.

Corry. melanotrichus. Clustering tall branched plant with white spines and red flowers.....3 in. S 50c



Carnegiea gigantea

E. S. Gourlay, New Zealand

Haageocereus chosicensis. The Orange Torch Cactus. Short, stout columns covered with closely set orange spines, red flowers. One of the finest new ones from South America.....1 $\frac{1}{2}$ in. S 35c

Lemaireocereus. A beautiful group of easily grown pot plants and magnificent garden varieties from Mexico. The branches of the different species vary greatly in color, number of ribs and spine patterns. They will not blossom in pot sizes.

Lem. chende. A beautiful yellow green, few ribbed plant bearing golden brown spines.....2 in. S 25c

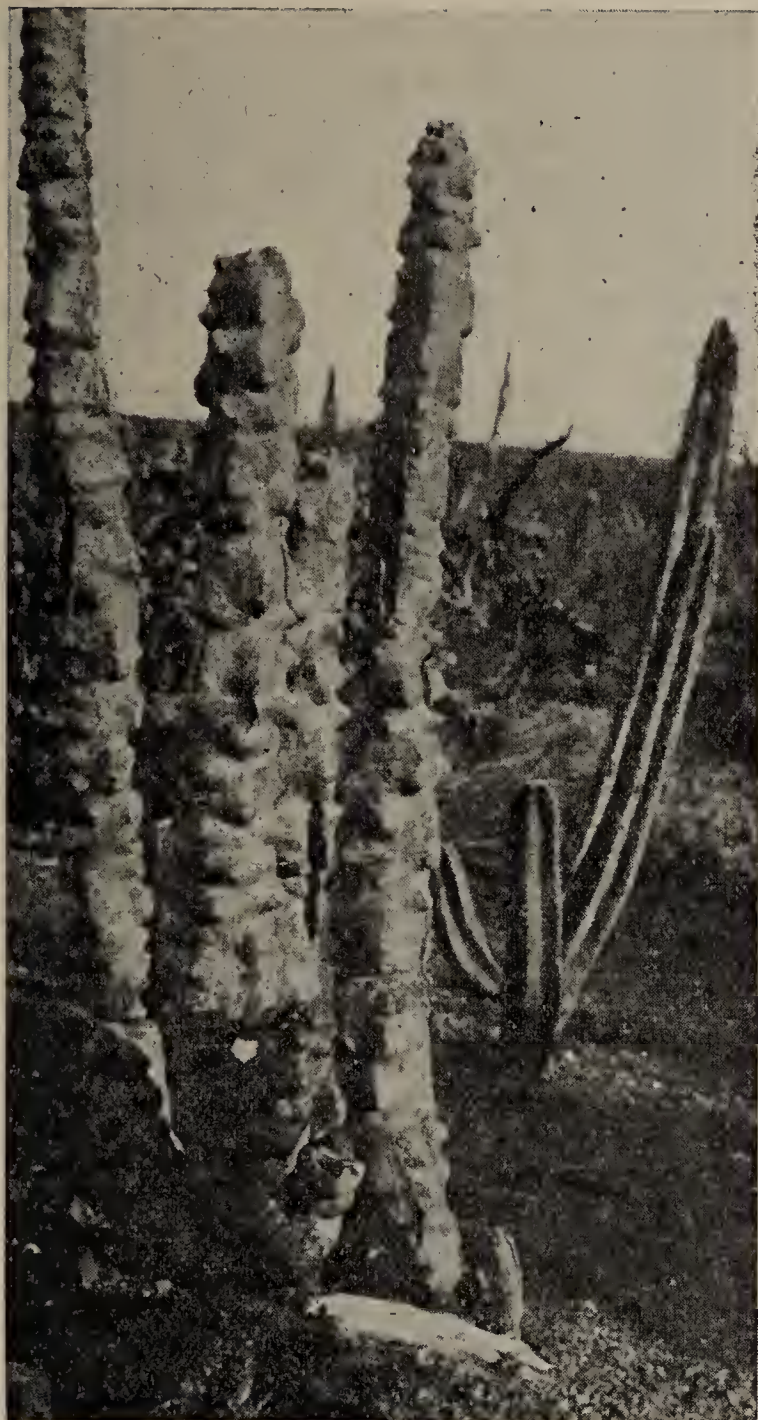
Lem. griseus. Large, few ribbed, powdered, gray branched plants....3 in. S 35c

Lem. marginatus. (*Pachycereus*). The Organ Pipe cactus. The few ribbed, columnar branches grow in upright clusters resembling an organ's pipes. The edges of the ribs bear very short spines.....3 in. S or RC 25c



Machaerocereus eruca

- Lem. montanus.** A newly introduced fast growing green columnar plant with yellow brown spines.....2 in. S. 50c
- Lem. stellatus.** The Star Cereus. Beautiful large columnar branches with light spines arranged in star clusters4 in. S. 50c
- Lem. thurberi.** The Pithaya Dulce. Many ribbed, brown spined columnar branches that bear the favorite fruit of millions of Mexicans.....2 in. S 25c
- Lem. weberi.** A fine large and freely spined branching plant.....4 in. S 50c
- Lophocereus.** The Crested Cereus are a genus of many columnar branched plants from north western Mexico and Low. Calif. The branches usually arise from or near the base. The lower several feet of the branches bear short stiff spines. The upper portions bear numerous hairy spines varying in color from white to black. Old plants bear trumpet shaped pink flowers an inch and a half long followed by bright red fruit.
- L. australis.** Slender branches with six to ten angled ribs. This species sometimes reaches a height of twenty-five feet with hundreds of branches arising from a single trunk.....2 in. S 35c
- L. gatesii.** (Marcus Jones 1934). A striking new species discovered on our 1933 expedition. The fluted branches are rounder, bearing more ribs and spines than the other species.....2 in. S 35c
- L. sargentianus.** A slender intermediate form between Australis and Schottii2 in. S 35c
- L. schottii.** Large four to seven angled branches.....2 in. S 25c, 3 in. S 35c, 4 in. S 50c, 5 in. S 75c
- L. schottii monstrosus.** The Totem Pole Cactus. A strange freak of nature discovered by us in Lower Calif. and christened with this appropriate name by visitors to the Century of Progress Exposition. We have found only two small colonies in all of our exploring for plants. The habit of growth is similar to that of L. schottii, but the ribless and spineless branches are covered with smooth green skinned irregular knobs and bumps. No two are just alike. Variety Obesus is a fat heavy form. Variety Miecckleyanus is a more slender and more freely branched form we found in 1934. Both forms blossom when old, but neither is known to produce seed. Either form. 3 in. RC \$1.00, 6 in. RC \$2.00, 9 in. RC \$3.00, 12 in. RC \$4.00, 15 in. R \$5.00.
- Machaerocereus eruca.** Low. Calif. The famous Creeping Devil cactus which is only found on the shores of Magdalena Bay, where it grows prostrate on the ground, dying behind as the head advances. Diameter of branches 3 to 5 inches, length up to 10 feet. The rooted cuttings from old plants are much heavier and bear stronger spines than the seedlings.....1½ in. S 25c, 3 in. RC \$1.00
- Machaerocereus gummosus.** Low. Calif. Pithaya Agria. Strongly angled, large branched plant with stiff, dagger like spines. Old plants bear large white, lavender shaded, night blooming flowers and spiny, red, edible fruits2 in. S 25c
- Myrtillocactus** are a group of large plants from Mexico bearing many outward and up-curved branches from a single trunk. The small white flowers followed by red berries will not appear on seedlings for many years.
- M. cochal.** A much branched Low. Calif. species with dark green branches and dagger like spines.....1½ in. S 25c



Lophocereus schottii monstrosus. Normal form in right background.

M. geometrizzans. A richly colored, blue branching plant with short spines.....
.....3 in. S 35c

Oreocereus. A fine group of columnar hairy plants from South America. Red flowers may be expected when plants are several feet high.

Ore. celsianus. (Pilocereus). An Old Man of the Mountains from high in the Andes. A beautiful columnar plant with white, silky hair over highly colored spines.....2½ in. S 50c

Ore. trollii. (Pilocereus). Slower growing than Celsianus, but beautifully clothed with white hair over red spines
.....1½ in. S 50c

Pachycereus. These two Elephant Cereus are the giants of Lower California cacti. They are more slender in youth and much faster growing than the familiar Arizona Giant. In pots they form marvelous fluted columns of artistic proportions. Not house bloomers.

P. pecten-aboriginum. A very fast grower forming slender columns. The Indians formerly used the chestnut like hull of the fruit as a comb, hence the name
.....1½ in. S 25c, 3 in. S 50c

P. pringlei. The larger and hardier of the pair. Quickly and easily grown. 2 in. S 25c, 3 in. S 35c, 4 in. S 50c, 5 in. S 75c.

Pilocereus glaucescens. A fine large branching species with weak hairy spines. Easy to grow.....1½ in. S 25c

Pilocereus gounellii. A freely branching large species plentifully supplied with brown spines.....1½ in. S 25c

Piptanthocereus. Usually called Cereus are large upright branching plants. (A few are procumbent). Branches are angled or strongly ribbed. The large, usually white night blooming flowers are followed by edible, large, fleshy fruits. Seedlings will not bloom under house culture, but cuttings from mature plants will.

Pip. alacriportanus. (Paraguayensis). A green, strongly angled plant with strong brown spines.....RC 50c

Pip. glaucus. (Monvilleanus, Blue Beauty). The large blue branches are edged with clusters of golden brown spines.....6 in. S 35c, 9 in. S 50c

Pip. hexagonus. (Lepidotus). Large blue green easily grown columnar plant
.....3 in. S 25c

Pip. hildmannianus. A large branched blue green plant with large, sweet scented, creamy white, night blooming flowers. We recommend these rooted cuttings highly because they should blossom every summer.....
.....6 in. RC 75c, 12 in. RC \$1.50

Pip. jamacaru. Large bluish branches with long spines.....3 in. S 25c

Pip. milesimus. A freely branched large species.....3 in. S 25c

Pip. monstrosus. We have a number of beautiful garden hybrid monstrosus in several types.....3 in. S 35c

Pip. pernambucensis. (Formosus). A grass green large plant of easy culture
.....3 in. S 25c

Pip. pernam. monstrosus. (Formosus monstrosus). Very interesting plant because of its knobby and gnarled branches.....2½ in. RC 35c

Pip. peruvianus. Easily grown large cereus with many bluish arms. Excellent grafting stock.....3 in. S 15c

Pip. peruvianus monstrosus.....3 in. S 25c

Pip. stenogonus. Another handsome, columnar, branching plant. Easily grown.....3 in. S 25c



Trichocereus spachianus

Third Prize Picture

Howard E. Edwards, New Zealand

Pip. variabilis. Heavy, semi-branching, usually four angled green branches. Rare. Strong.....RC 50c

Rathbunia alamosensis. A round branched Cereus bearing pretty scarlet flowers and fruit when old. Strong.....RC 35c

Trichocereus are a fine group of easily grown plants from moderate to high elevations in South America. Their heavy, columnar branches usually grow from the base. Old plants will bear very large blossoms.

Trich. bridgesii. Forms clusters of short, green sparsely spined, columnar branches.....3 in. S or RC 35c

Trich. candicans. Clusters of green columnar branches freely bearing yellowish spines.....2 in. S 25c

Trich. chilensis. Forms clusters of short, thick stems, well spined.....2 in. S 35c

Trich. fascicularis. Closely clustering green, columnar plant with an abundance of white spines.....2 in. S 35c

Trich. pachanoi. Rounded blue green ribs bearing very few short spines. A very fine, rare plant and an easy, rapid grower.....3 in. RC 50c

Trich. pasacana. Forms clumps of very heavy, strongly spined branches.....2 in. S 25c, 4 in. S 50c

Trich. schickendantzii. Forms dense clusters of short, stout fluted branches covered with short, yellow brown spines. Old clumps are noted for their large numbers of immense day blooming white flowers, 2 in. RC 25c, 4 in. RC 50, small clusters 50c, 75c, \$1.00.

Trich. shaferi. Clustering, short, heavy branches with short whitish spines, large flower. Strong.....RC 75c

Trich. spachianus. White Torch Cactus. Forms clusters of tall fluted columns covered with short brown spines. A favorite grafting stock. 3 in. S 25c, 2 to 3 in. S for grafting stock. \$1.50 per dozen.

Trich. strigosus. Short heavy branches, yellow spines, very large white flowers.....1 in. S 25c, 2 in. S 35c

NIGHT BLOOMING CEREUS

Under this heading we are grouping a number of climbing and clambering night blooming cactus. All have rather slender branches and some cling by aerial roots. Most of them have very large, fragrant white blossoms.

Eriocereus. A genus of slender, clambering plants from South America that are generally called Harrisias. All are good bloomers in the house. Easy culture.

Erio. bonplandii. (Harrisia). Sparsely spined strong branches, large white flowers. Fine grafting stock....RC 35c

Erio. martinii. (Harrisia). Round clambering branches with few spines, white flowers followed by red fruits. Strong and easily grown.....RC 25c

Erio. tepracanthus. The latest thing from Bolivia. Large branches bearing white spines, white flowers..3 in. S or RC 50c

Erio. tortuosus. (Harrisia). Round clambering freely spined branches, many large flowers, red fruit.....3 in. S or RC 25c

Harrisia. A genus of slender upright branched, night blooming plants from the Carribbean area. Good for the house.

Har. brookii. One of the stouter ones of this group forming tree like plants with fluted branches and many brown spines.....3 in. RC 35c

Har. fragrans. Forms clusters of upright branches similar in size and shape to *Nyctocereus serpentinus*. Yellow spines, pink flowers. Fine grafting stock.....3 in. S or RC 35c

Hylocereus are climbing forest plants from tropical America. Their branches are three angled and they cling by aerial roots. The spines are either short or lacking. The freely produced night blooming flowers are very large and fragrant.

Hylo. ocamponis. Powdered gray branches, wavy margins, very large flowers.....RC 35c

Hylo. triangularis. Light green, three cornered, large branches with fine flowers. Our own importation from Cuba.....RC 50c

Hylo. undatus. Queen of the Night. An excellent climbing plant for partly shaded places and the house. Usually three broad, thin, spineless ribs with undulated margins. Large flowers followed by red fruit.....RC 35c

Monvillea. A South American group with long clambering branches. Large flowers followed by spineless red fruits.

Mon. cavendishii. A strongly angled, heavy branched plant, white flowers.....RC 35c

Mon. marmorata. Slender, nearly square, short spined, variegated, dark branches.....RC 50c, Grafted \$1.00



Eriocereus martinii
Second Prize Picture
Jason Deme, Hawaii

Mon. phatnosperma. Nearly round branched, clambering plant with large white flowers.....RC 35c

Nyctocereus serpentinus. The old favorite Queen of the Night. Slender, fluted, columnar, clustering branches, fine brown spines, white flowers. Good grafting stock.....RC 25c, 35c

Selenicereus. Slender, climbing plants clinging by aerial roots. Spines are short and the large flowers are followed by red fruits. They blossom well in the house.

Sel. brevispinus. A fine Cuban species with white flowers.....RC 50c

Sel. coniflorus. Slender climbing plants that bear flowers a foot long....RC 35c

Sel. macdonaldiae. One of the largest flowered of the whole cactus tribe. A splendid grafting stock for slender species. Four to six sided branches..RC 25c

Sel. murrillii. Very slender, striped dark branches bearing very small, light colored spines.....RC 35c, Grafted 75c

Sel. pteranthus. Princess of the Night. A free bloomer bearing very large fragrant flowers.....RC 35c

Sel. spinulosus. Square to pentagonal branches freely supplied with short spines and aerial roots.....RC 25c

Sel. vagans. A free blooming, very easily grown species with short spines..RC 25c

Sel. Wegener's Hybrid from Sel. Vagans. A small branched, trailing plant for hanging baskets.....RC 25c

Sel. wercklei. Slender, yellow green fluted branched, free growing Costa Rican species with bright red flowers! Very rare.....RC 75c

Sel. pteranthus x Eriocereus bonplandii. Brassfield's interesting production. A strong growing plant.....RC 25c

Weberocereus. A tropical genus with slender round or angled branches bearing aerial roots.

Web. biolleyi. Slender variable round or winged branches. Pink flowers. One of our own importations from Costa Rica.....RC 50c

Web. panamensis. A winged, gray green branched climber with white flowers. Rare.....RC 50c

Our customers thank us for fine

packing and say that our

plants grow.

ECHINOCEREUS

Among the Hedge Hog Cactus are some of our finest house and garden varieties. Nearly all are easily grown and many produce large bright colored flowers. There are several groups such as the depressed spined single headed ones, long spined clusters, short spined clusters and sparsely spined, slender branched procumbent species. They are all numbered among the smaller cactus as few get over a foot in height.

Ech. species. Crests of an unidentified species bearing very short, red and yellow spines.....Grafted 75c

Ech. barthelowanus. Low. Calif. Forms clusters of small heads hidden by straight brown to purple spines. Rooted divisions.....35c, 50c

Ech. blanckii. Clusters of short spined, few angled slender branches, large purple flowers.....RC 25c

Ech. brandegeei. Clusters of tall heads bearing flat, heavy gray or yellow spines, large clear pink flowers.....RC 35c, 50c, 75c

Ech. chloranthus. Clusters of tall heads bearing vari-colored bright spines, green flowers. Plants.....25c, 35c, 50c

Ech. coccineus. Compact clusters of short spiny heads, red flowers. Quite hardy. Small plants.....25c

Ech. dasyacanthus. Stout heads covered with light, vari-colored spines, large yellow flowers. Plants.....25c, 35c

Ech. delaetii. Clustered large heads that become completely covered with long white hair. Beautiful pink flowers. Small grafted.....75c

Ech. ehrenbergii. Forms clusters of small light green branches bearing soft white spines. Small.....RC 25c

Ech. engelmannii. Clustering large branches with vari-colored long spines, large magenta flower. Quite hardy. Collected plants.....15c, 25c, 35c, 50c

Ech. enneacanthus. Clusters of tall, fat, green branches, white spines, many pink flowers. Clusters.....25c, 35c, 50c, 75c

Ech. ferreirae. (Gates in lit.) Low Calif. A fine new species discovered on our 1934 Mexican trip to be named in honor of Senor Enrique Ferreira, former Consul in San Diego. This large headed clustering species is peculiar in that every head grows its own roots. The large clear pink flowers bear white spine clusters on their outer scales.....RC 50c, 75c

Ech. fitchii. Heavy heads covered with light colored short spines, large pink flowers. Plants.....25c, 35c, 50c

Ech. knippelianus. A few ribbed, glossy dark green plant bearings few very small spines, pink flowers. Small grafted plants.....75c

Ech. maritimus. (Cereus flaviflorus). Low. Calif. This species forms many headed large clusters along the sea coast with spines varying from yellow to gray. The yellow flowers are produced freely over a long period.....RC 25c, 35c, 50c

Ech. melanocentrus. A new beauty that is one of our favorites. Clusters of small, short spined heads bearing beautiful pink, red centered flowers. Plants.....25c, 35c, 50c

Ech. mojavensis. The Dill Pickle Cactus. Compact clusters of green heads, curved gray spines, red flowers. Hardy.....1½ in. S 25c

Ech. pacificus. Low. Calif. A rare but easily grown fine species. The densely clustered heads are hidden by brown to purplish spines. Red flowers.....RC 35c, 50c, 75c

Ech. pensilis. Low. Calif. All the known plants in the country came from one cluster we found while on a hard mule trip into the high mountains of the Cape. Branches pea green, an inch or more in diameter with almost white spines, scarlet flowers. A few RC 75c



A California Cactus Garden

Ech. pentalophus. (Berlandieri). Pro-cumbent clusters of angled, slender branches, few spines, large purple flowers.....RC 15c, 25c

Ech. purpureus. A new clustering species with short brown spines tipped with purple, magenta flowers. Plants.....25c, 35c, 50c

Ech. reichenbachii. (Caespitosus). The Lace Cactus. Clusters of stout heads with depressed, vari-colored spines, large pink flowers. Plants.....15c, 25c, 35c, 50c

Ech. rosei. Clusters of large heads, vari-colored spines, scarlet flowers. Hardy. Clusters.....75c, \$1.00, \$1.25

Ech. sarissaphorus. Large clustering heads with very long spines, pink flowers. Rare.....2 in. S 35c

Ech. sciurus. Low. Calif. Forms Mammillaria like clusters of stout heads covered with short white to gray spines, large clear pink flowers. Much better grafted.....RC 35c. Grafted 75c, \$1.00

Echinocactus are large globular plants of great beauty from the Mexican deserts. The tops of old plants are covered with mats of felted wool from which the flowers and fruit emerge. They grow slowly and may be handled in pots for many years.

Etus. horizontalonius. The Devil's Head. Hemispherical gray green plants with depressed stiff spines, pink flowers. Grow in a coarse soil containing much lime.....3 to 4 in. P 50c

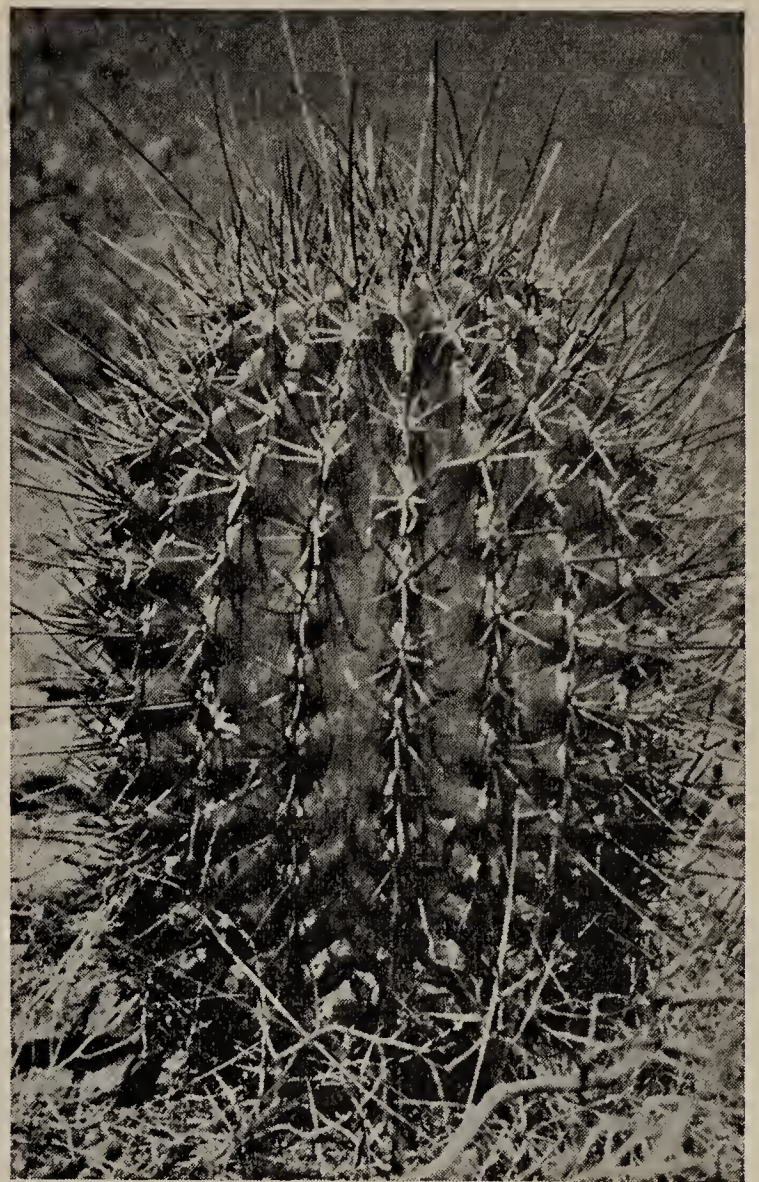
Etus. grusonii. The famous Golden Ball Cactus. Globular plants bearing straight golden spines. The larger the plants, the finer the color.....1½ in. S 25c, 2 in. S 50c

Etus. ingens grandis. Globular, gray green plants that develop bright purple markings when several inches in diameter.....2 in. S 35c

Etus. polycephalus. Clustering, globular plants with heavy long gray spines. Grow best in coarse granite soil with lime and little water.....2 to 3 in. P 35c, 3 to 4 in. P 50c

Ferocactus. The large globular to cylindric Barrel Cactus whose macerated pulp has quenched the thirst of many men. They reach their greatest glory and abundance in Lower California where over half the known species are found. Most kinds do not blossom in pot sizes.

F. acanthodes. (Etus. cylindraceus). The large red, yellow or gray spined California Barrel Cactus. Collected plants from.....25c to \$1.00



Ferocactus rectispinus
The Hat Pin Cactus

F. coloratus. (Gates 1933). Low Calif. Its reddish brown spines are probably the widest of any known cactus.....1 in. S 35c, 6 in. P \$5.00

F. crassihamatus. Globular with depressed vari-colored spines. Very unusual in that several of the radial spines are hooked.....1½ in. S 35c

F. fordii. Low. Calif. A small sea-coast species bearing broad gray spines and bright pink flowers. Will bloom in the house.....1½ in. S 35c

F. glaucescens. (Etus. pfeifferii). A globular yellow spined beauty that every one should have.....2 in. S 35c

F. gracilis. (Gates 1933). Low. Calif. A tall growing, red spined species.....1½ in. S 35c

F. hamatacanthus. (Etus. longihamatus). The Mexican Candy Cactus. Attractive dark green plant, gray hooked spines, large yellow flower. 6 in. blooming size plants.....\$1.50

F. latispinus. (Etus. corniger). The wide spines of this famous species are only exceeded in width by our new F. coloratus.....1½ in. S 35c

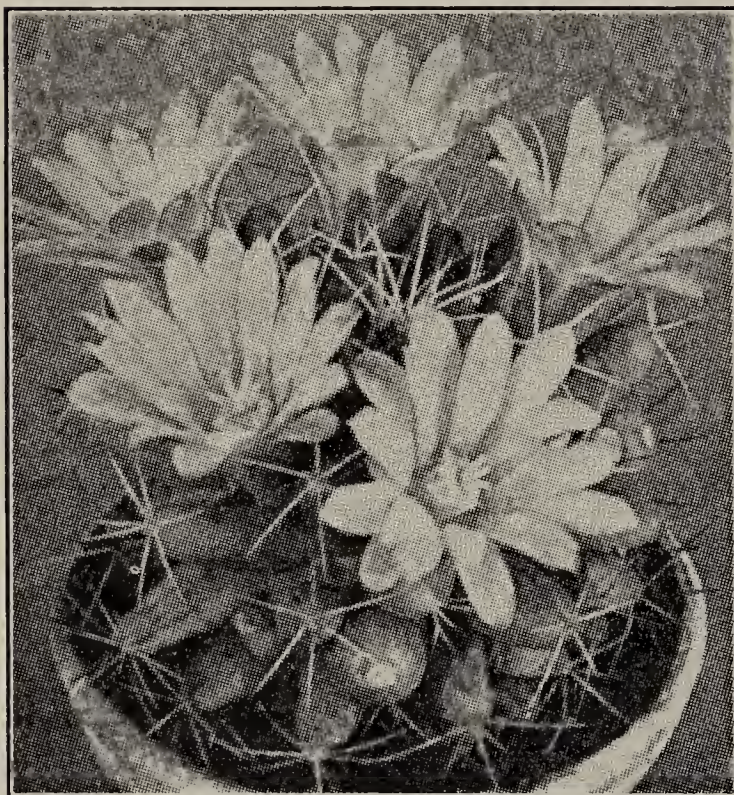
- F. melocactiformis.** (Etus. electracanthus). Globular to cylindric plants with curved yellow spines. Strongly nipped when young. Easily grown.....2 in. S 35c
- F. nobilis.** (Etus. recurvis). Globular with yellow to red spines.....1½ in. S 35c
- F. peninsulae.** Low. Calif. A very rare and beautiful species with long, heavy hooked spines. We grew these plants from seed of our own collecting and they are probably the only true plants on the market.....1 in. S 50c
- F. rectispinus.** Low. Calif. The Hat Pin Cactus. Probably the longest spined of any cactus. The straight spines may reach ten inches in length.....1 in. S 35c, 1½ in. S 50c
- F. tortulospinus.** (Gates 1933). Low. Calif. A large growing barrel cactus noted for its long twisted and hooked spines, yellow flowers.....4 in. P \$4.00

F. townsendianus. Low. Calif. Not related to the Townsend Plan, but fully as popular. This beautiful and easily grown plant has broad green ribs topped by small clusters of light gray spines. 1½ in. S 25c, 2 in. S 35c, 3 in. S 50c.

F. viridescens. The hemispherical green flowered Nigger Head of the California seacoast. Blooms in the house. Collected plants.....15c, 25c, 35c, 50c, 75c, \$1.00

Variety littoralis from Low. Calif. A more globular plant with more slender, numerous and colorful spines than Viridescens.....1½ in. S 35c

Homalocephala texensis. (Etus. texensis). Related to the two preceding groups. Hemispherical green plants bearing beautiful pink flowers followed by scarlet fruit. In Texas it is called the Horse Crippler because of its stiff stout spines.....3 to 4 in. P 50c



Dolichthole longimamma



Rebutia minuscula

SMALL CACTUS

This section of our list includes a large number of the smaller species especially suitable for house culture. It includes many of the most beautiful and best blossoming plants.

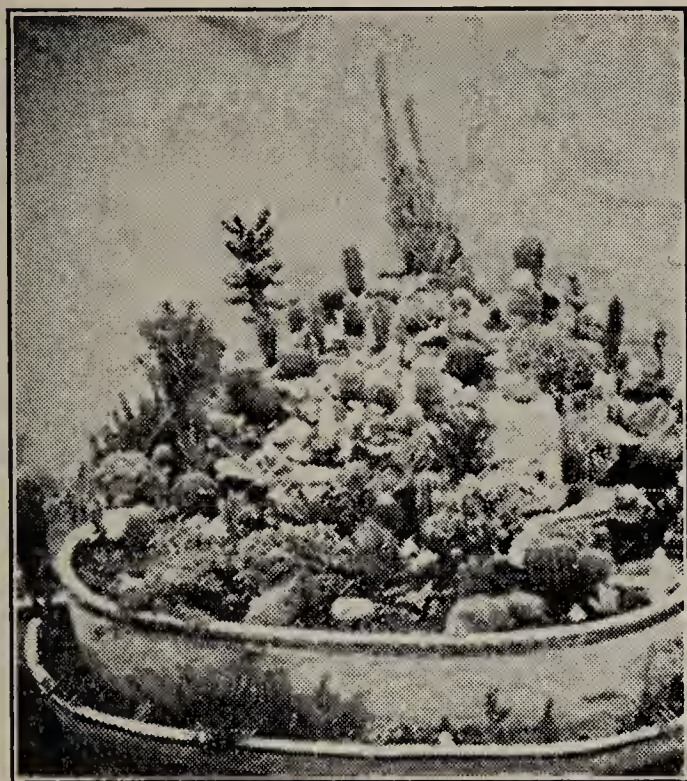
Ancistrocactus brevihamatus. Globular to oblong plants with large fleshy roots, vari-colored hooked spines, rose pink flowers.....2 in. S 35c

Arthrocereus microsphaericus. (Dama-zoe). An interesting plant from South America. Green branches formed of small spined, ovate joints, slender

tubed, large white flowers. Small grafted plants.....\$1.00

Astrophytums. The Bishop's Hoods, as this group of intriguing plants is called from their shape, are a group of globular plants ranging to six inches in diameter. All bear trumpet shaped yellow flowers at intervals during the summer.

A. asterias. The Sea Urchin Cactus. A smooth, ribless, spineless, hemispherical species bearing rows of wooly dots. 1½ in. P 35c, 2 in. P 50c, 2½ in. P 75c, 3 in. P \$1.00.



Small Cactus in the House

A. myriostigma. Usually five angled, dark green plants covered with tiny white dots. The species from which the group gets its common name.....
.....1 in. S 35c

A. ornatum. Globular plants with deeply cleft, white dotted ribs bearing short spines, yellow flower with red throat
.....1½ in. S 50c, 2 in. S 75c

Cochemeias are an interesting group related to the Mamillarias. They form large clusters of tall heads in the fashion of some Echinocereus. The scarlet flowers are shaped like those of the Christmas Cactus. Setispina and Maritima are only to be obtained by long burro trips into desolate country. Probably this is the first time they have been catalogued in the United States.

Cochemeia maritima. (Lindsay in lit.). Low. Calif. a new species discovered in 1935. Forms clusters of dark heads with brown hooked spines.....
.....2 in. RC \$2.00

Cochemeia poselgeri. (Mam. roseana). Low. Calif. Forms clusters of tall heads bearing overlapping nipples with a long hooked spine in each cluster. A very good species. 1½ in. S 25c, 2 in. S 35c, 3 in. S 50c, RC 50c 75c, \$1.00.

Cochemeia setispina. Low. Calif. Beautiful large heads covered with hooked white spines.....2 in. RC \$2.00

Coryphantha. A group of conical to oblong plants all bearing stiff spines on grooved tubercles and flowering only at the apex of the plant. Often called Mamillarias in Europe. Native only to the U. S. and Mexico.

C. alversonii. The Fox Tail Cactus usually mis-called C. desertii. Oblong, clustering heads hidden by short, stiff white, brown or black spines, pink flowers. Hard to grow. Plant in coarse limey soil and water sparingly. Collected plants 35c, 50c.

C. echinus. Pointed, hemispherical plants covered with light colored, stiff spines, yellow flowers.....2 in. P 35c

C. erecta. Tall heads bearing star shaped clusters of short yellow spines, large yellow flowers.....1½ in. S 25c

C. macromeris. Clusters of long green nipples tipped with long gray spines, large pink flowers. Plants 25c, 35c, 50c

C. neo-mexicana. Globular plant with brown spines, purplish flowers. Hardy
.....1½ in. P 35c

C. pallida. Globular plant, depressed white spines, yellow flower.....
.....1½ in. S 25c

C. pectinata. Globular plant covered with light, recurved spines, yellow flower
.....2 in. P 25c

C. robustispina. A beautiful, large nipped, heavily spined plant, pink flowers. Rare.....1½ in. S 35c

C. vivipara. Hemispherical plant, light colored spines, pink flowers. Very hardy. 1 in. S 15c, 1½ in. P 25c, 2 in. P 35c.

Dolichthole longimamma. Bears long green nipples tipped with small spine clusters, yellow flowers. A fine type of plant.....1 in. S 25c

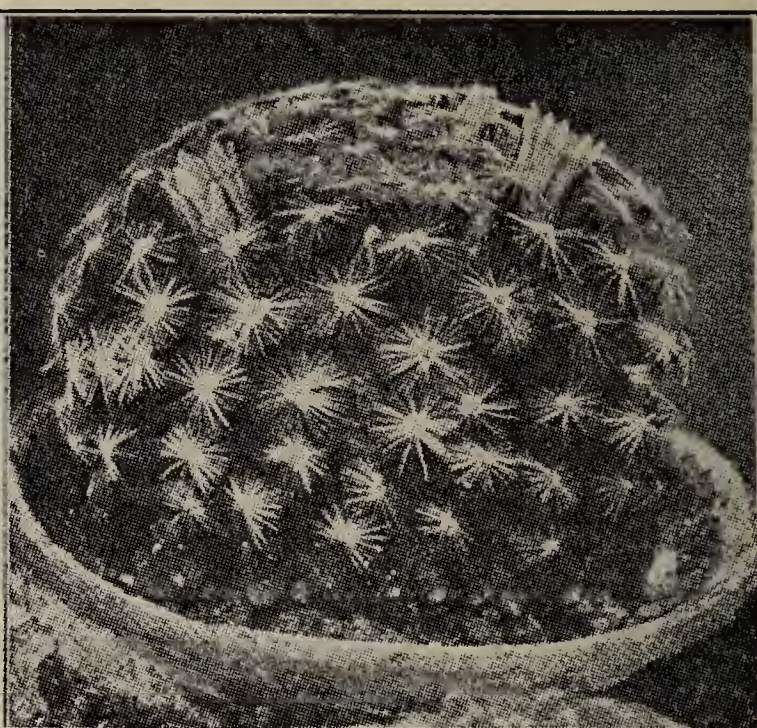
Dolichthole sphaerica. (Mam. sphaerica). The Nipple Cactus. Clusters of light green, long nipped heads, fragrant clear yellow flowers.....1½ in. P 35c

Echinomastus. A group of small rounded plants from the U. S. and Mexico which are closely related to the Ferocactus and Echinocactus. As a group they are very hard to grow and probably need much lime.

Echino. johnsonii. (Ferocactus). Globular to ovate plants with many straight pinkish spines, pink flowers. Collected.
.....P 25c, 35c

Echino. uncinatus. (Ferocactus). The Turk's Head or Cat's Claw Cactus. A small slender Barrel Cactus with a crown of long hooked spines. Collected plants.....25c, 35c, 50c

Echinopsis. A fine genus of globular to barrel shaped, often clustering plants from South America. Their easy culture and very large day blooming flowers make this group one of the best for house culture. See front cover picture.

**Notocactus haselbergii****Mammillaria schiedena**

Ech. bridgesii. A magnificent globular species with very large white flowers. Small grafted.....\$1.50

Ech. camplyacantha. Clustering, globular plants with large tubular white flowers. Small.....RC 25c

Ech. imperialis. An excellent new species of unknown origin. Tall cylindric plants with short spines and beautiful white flowers. Small grafted.....\$1.00

Ech. kratochviliana. Globular plants with stiff gray spines, creamy white flowers. Small grafted.....\$1.00

Ech. multiplex. Clustering, globular plants bearing immense trumpet shaped pink flowers. One of the best. Small RC 15c, 2 in. P 25c, 3 in. P 50c, 4 in. P \$1.00.

Ech. nigra. A dark spined species with white flowers. Small grafted.....\$1.00

Ech. pelecyrhachis. Another fine one. Small grafted.....\$1.00

Ech. tubiflora. Globular clustering plants, white flower. Small.....RC 25c

Ech. turbinata. Clustering, short spined, globular heads bearing large white flowers. Small RC 15c, 2 in. P 25c, 3 in. P 35c, 4 in. P 50c.

Epithelantha micromeris. The Golf Ball or Button Cactus. Little balls covered with a dense net work of fine white spines. Tiny pink flowers, red fruit. P 15c. A variety with a waxy appearance.....P 15c

Eriosyce korethroides. A splendid new globular plant from South America. Grows larger than Echinopsis. Red flowers. Small grafted plants, \$1.00

Escobaria runyonii. Clusters of very small, round, fine spined heads. Plants25c

Escobaria dasyacantha. Tall clustering heads covered with straight white spines, pink flowers. 2 in. P 25c. Clusters50c

Escobaria sneedii. A white spined rare species. Small grafted plants.....75c

Frailea. A South American genus of very small, freely clustering plants with rounded or depressed tops and low tubercled ribs bearing very small, harmless spines. The yellow flowers are small and usually cleistogamous i.e. they set fruit without the flower opening.

Fr. grahlianus. Purplish plants with light colored spines.....1 in. RC 35c

Fr. pumilis. Freely clustering plants with many purplish spines.....1 in. blooming P 50c

Fr. schilinzkianus. Biscuit shaped green plants, short dark spines.....1 in. blooming P 50c

Gymnocalyciums are a group of small, hemispherical plants from South America. They bear short, stiff spines, many flowers, and brilliant fruits. All are worth a place in any cactus collection.

Gymo. mihanovichii. Hemispherical, highly colored plants with light depressed spines, green flowers, red fruits. Flowering plants.....1 1/4 in. 75c, 1 1/2 in. \$1.00

Gymno. quehlianus. Dark green hemispherical plants with appressed light colored spines. Rare. Strong grafted plants.....\$1.00, 1 1/4 in. S \$1.00

Hamatocactus setispinus. (Echinocactus). Globular, small green plants, brown hooked spines, many yellow flowers, red fruits.....1 1/2 in. S 25c

Lobivias. A fine group of globular to sub-cylindric small plants recently arrived from Bolivia. Some cluster. Though related to the *Echinopsis* the plants are usually smaller and bear yellow or red flowers instead of pink or white.

Lob. aurea. (*Echinopsis*). A beautiful heavily spined plant bearing yellow flowers when old. Small grafted plants \$1.00

Lob. chrysantha. One of the fine easily grown kinds with yellow flowers. Small grafted plants.....\$1.00

Lob. grandiflora. A fine globular species with very large pink flowers. Small grafted.....75c

Lob. haageana. (*Rebutia*). Globular Clustering plants with stiff yellowish spines, yellow flowers. Small grafted \$1.00

Lob. neo=haageana. (*Rebutia*). Small globular clustering plants with red flowers. Small grafted.....\$1.00

Lob. orurensis. A very fine new species. Small grafted.....\$1.25

Lob. pygmaea. (*Rebutia*). Freely clustering small heads bearing fine spines and many scarlet flowers. Small grafted plants.....75c

Lob. steinmannii. (*Rebutia*). A very fine globular kind. Clean green skin overlaid with a net work of fine spines, scarlet flowers. Small grafted plants75c

Lophophora williamsii. (*Anhalonium*). The Peyote, Mescal Button, Dry Whiskey. A carrot rooted, blue green, mushroom topped, spineless plant with small pink flowers. Contains an intoxicating drug for which reason it is eaten in Indian ceremonials. Collected plants 25c, 35c. Clusters 75c, \$1.00.

Mammillaria. (Neomammillaria). Dump-ling Cactus, Fish Hook Cactus, Pin Cushion Cactus. This is one of the most numerous and desirable groups for household culture. Relatively they are all small plants. There are globular single headed kinds and tall much branched ones. A large group of globular, straight spined ones has milky sap. There is a great variety in spine patterns and colorings. Usually the flowers are small, though this is often compensated by their brilliance. Several months after flowering most kinds bear brilliant red fruits which hang on for weeks. They grow readily in pots and because of their small size a great many may be grown in a small window

garden. This group prefers a light shade to the open sunshine. We are listing seedlings of some of our fine new discoveries in Lower California, Mexico, but the best species of all is not yet ready to offer.

Mam. arida. Low. Calif. A milky type with beautiful white to brown spines, some wool in the axils, yellow flowers1 in. S 25c

Mam. armillata. Low. Calif. Forms clusters of tall blue green heads bearing white to rich brown spines, yellow flowers. Branches are often marked by darker horizontal bands..1 1/4 in. S 25c

Mam. baxteriana. (Gates 1934). Low. Calif. Named in honor of the past President of the Cactus & Succulent Society of America. A milky, globular, nearly white spined species, yellow flowers.....1 in. S 25c

Mam. blossfeldiana. (Gates 1933). Low. Calif. This one is in a class by itself. Not milky, yet has roots like a carrot, small globular heads with hooked brown spines, magnificent large pink flowers, red fruits. A fine grower when grafted. 1 1/2 in. P 75c, 2 in. P \$1.00. Clusters \$1.50. Grafted, ready in August 75c

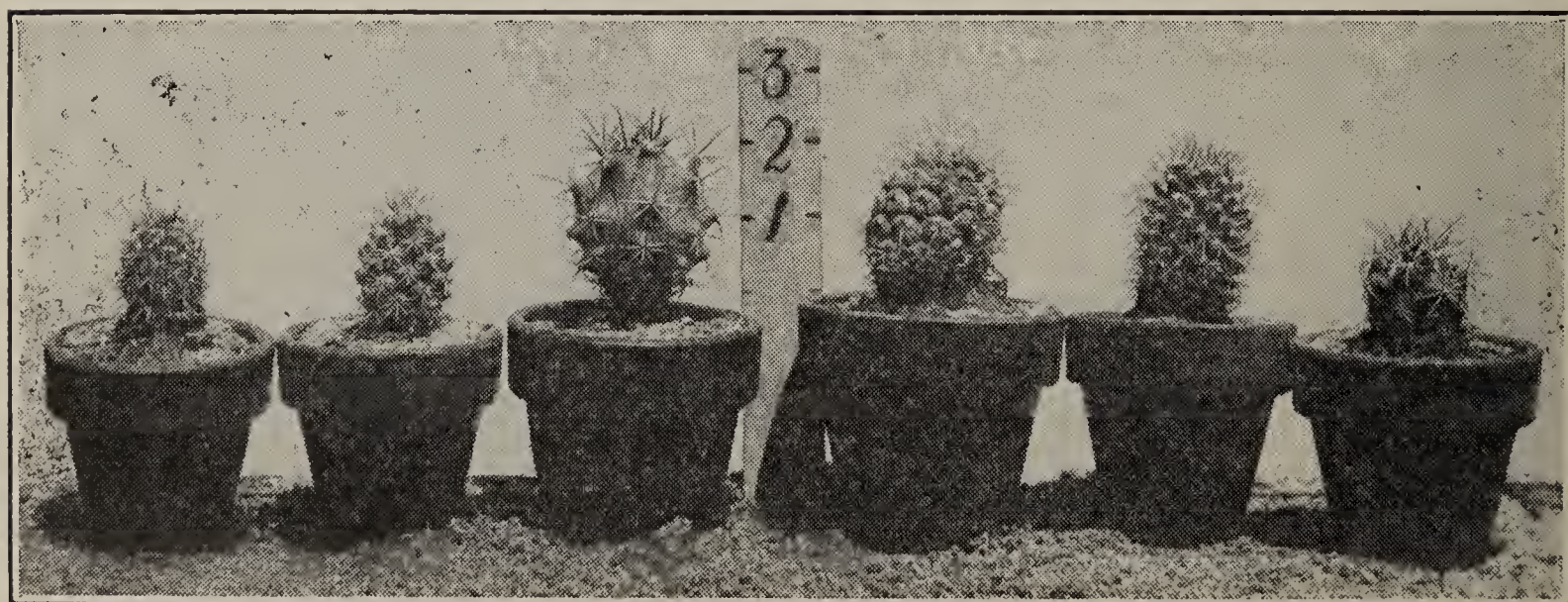
Mam. bocasana. One of the easiest to grow and very beautiful. Round heads bearing both hooked spines and long, silky white hairs. Yellow or pink flowers.....1 1/2 in. S 25c

Mam. brandegeei. Low. Calif. Hemispherical milky type with fine gray or brown spines, yellow flowers.....1 in. S 35c

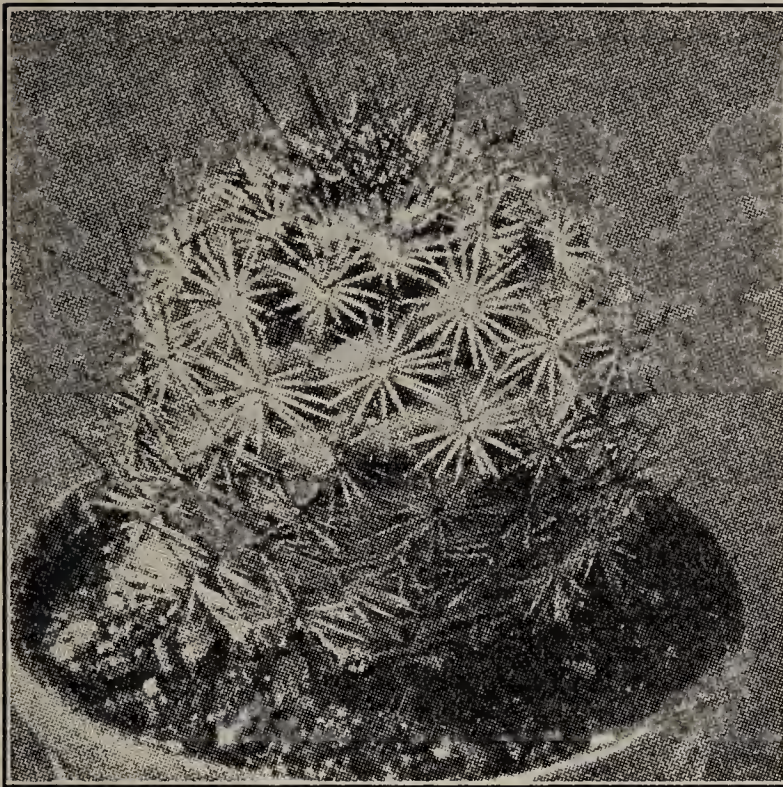
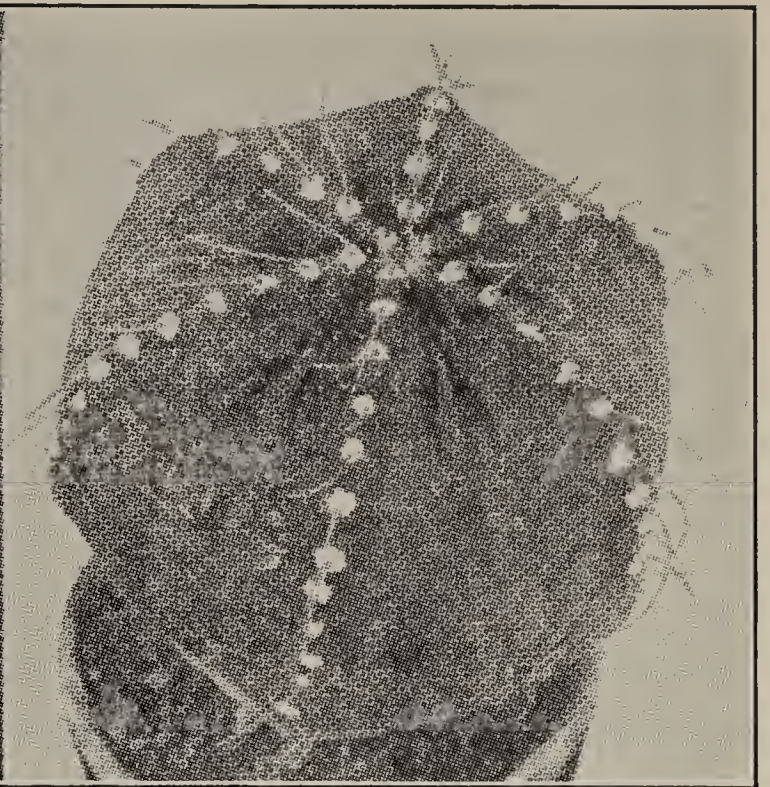


Mammillaria baxteriana

- Mam. bullardiana.** (Gates 1934) Low. Calif. Named for Howard O. Bullard of Hackensack, N. J., who has the finest private collection on the Atlantic coast. One of the best things from our 1933 collecting trip. Not milky, tall clustering heads, fine rather soft spines with brown hooked centrals, pale pink flower, red fruit.....1 in. S. 35c, 1½ in. RC 50c
- Mam. camptotricha.** Clustering, long green nipples tipped with curling hair-like yellow to brown spines, white flowers.....1 in. S 25c
- Mam. capensis.** (Gates 1933). Low. Calif. A discovery we are proud of. Many tall branches, brown hooked spines, pink flowers, red fruit. Easily grown. 1½ in. S 25c, 2 in. S 35c, 3 in. S 50c. Clusters 75c, \$1.00.
- Mam. capensis pallida.** A variety of our discovery with nearly white flowers.....1½ in. S 25c
- Mam. caput-medusa.** Globular, milky, red tinted plants bearing very few short spines.....1 in. S 25c
- Mam. carnea.** Hemispherical, dark green plant, short stiff spines, red flower.....1 in. S. 25c
- Mam. celsiana** var. **potosina.** Globular, densely covered with short light colored spines.....1 in. S 25c
- Mam. chionocephala.** A large globular species covered with light colored short spines, red flower.....1 in. S 25c
- Mam. compressa.** A hemispherical plant bearing short stout nipples with wooly axils, red flower.....1 in. S 25c
- Mam. decipiens.** Forms dense clusters of deep green heads, reddish brown spines, white flowers.....1 in. RC 35c
- Mam. denudata.** A tiny globular plant covered with short white spines, purple flower.....1 in. P 35c
- Mam. dioica.** Forms clusters of rounded gray green heads with reddish brown spines, cream flower. Collected pants.....15c, 25c, 35c, 50c
- Mam. durispina.** Globular, dark green, milky plant, heavy nipples, very stout, short spines, carmine flowers 1 in. S 25c
- Mam. elegans.** Beautiful globular plant covered with short light spines, purple flower.....1 in. S 25c
- Mam. elongata** var. **stella aurata.** Golden Star Cactus. Freely clustering, slender headed plant bearing star shaped clusters of depressed yellow spines, yellow flowers. 1 in. RC 15c, Clusters 25c, 35c, 50c.
- Mam. fasciculata.** Tall headed, freely clustering plant with hooked spines, beautiful large pink flowers, bright red fruits.....RC 25c, 35c, 50c
- Mam. fraileana.** Low. Calif. A non-milky, tall clustering species with pinkish hooked spines, large pink flowers with orchid stripes.....1½ in. S 25c, 2 in. S 35c
- Mam. gabbii.** Low. Calif. Our field investigations cause us to believe this is a true species and not synonymous with *M. brandegeei*. It is larger, more globular and bears coarser brown spines. Yellow flowers.....1 in. S 25c
- Mam. gigantea.** A globular, milky plant with stiff spines, yellow flowers.....1 in. S 25c
- Mam. gracilis.** (Fragilis). The Thimble Cactus. Little thimble sized clustering heads covered with depressed white spines.....1 in. RC 15c
Small grafted crests.....75c
- Mam. guirocobensis.** (Marshall in lit.). A fine new one from Sonora. A small clustering species with tall heads bearing white spines and sometimes hooked centrals.....RC 50c, Grafted \$1.00



Seedling Mammillarias and Ferocactus.

**Mammillaria blossfeldiana****Echinocereus knippelianus**

Two very fine small types for the home.

Mam. hahniana. The Old Woman Cactus. Round heads densely covered with long white hair, brilliant pink flower. 1 in. S 35c, 1½ in. S 50c, 2 in. S \$1.00.

Mam. hemisphaerica. A flat, milky species white short spines, white flower, red fruit.....2½ in. P 25c

Mam. heyderi. Hemispherical green plant, short spines, cream flowers, red fruit1½ in. S 25c

Mam. johnstonii. Globular, milky species with white to red spines, white flower, red fruit. Rare. 1 in. S 35c, 3 in. RC \$1.50.

Mam. klissingiana. Globular milky plant densely covered with short white spines, red flowers.....1½ in. S 50c

Mam. lasiacantha. A tiny globular plant covered with microscopically feathered short white spines, pink flower.....1 in. P 35c

M a m . m a c d o u g a l l i i . Hemispherical, milky, brown spined plant, cream colored flowers.....1 in. S 25c

M a m . m a g n i m a m m a . Hemispherical milky plant with very heavy nipples, cream flower.....1½ in. S 25c

Mam. mainae. A few rooted cuttings of this fine plant. Write us.

Mam. meiacantha. Hemispherical plant with large, angled nipples, short stiff spines, white flower.....1 in. S 25c

Mam. multiceps. A tiny clustering species with soft brown spines.....RC 15c

Mam. mystax. A fine, globular, milky, green plant, creamy spines, red flowers and fruits.....1½ in. S 35c

Mam. pacifica. (Gates 1934). Low. Calif. One of the largest milky Mams from the Peninsula. Globular heads branching by division, straight brown spines, yellow flowers. Small S 25c

Mam. peninsularis. A deep seated, milky plant bearing very few spines on the prominent nipples, yellow flower.....1½ in. P \$1.00

Mam. perbella. Beautiful plants covered with very short white spines and dark centrals, red flowers.....1 in. S 25c

Mam. prolifera. (Pusilla). A tiny clustered plant, light colored spines, yellow flowers.....1 in. RC 25c

Mam. pottsii. (Leona). Tall heads, short white spines, tiny red flowers. Likes lime.....2 in. P 25c, Clusters 50c

Mam. pringlei. One of the finest. Globular, milky species covered with yellow spines, red flowers.....1½ in. S 35c

Mam. scheideana. A small species with green and purple heads overlaid with beautifully colored spines....1 in. S 35c

Mam. sempervivi. Globular, milky species with few, very short spines, white flowers.....1 in. S 25c

Mam. shurliana. (Gates in lit.). Low. Calif. A fine new plant to be named for Mr. E. Shurly one of the founders of the Cactus & Succulent Society of Great Britain. A small species with hooked, brown spines, very large pink flowers.....2 in. P \$1.00

Mam. standleyii. A rare, globular, milky species bearing reddish spines, red flowers.....Strong RC \$1.00

Mam. tetracantha. (Dolichocentra). Globular, dark green plants, large tubercles tipped with short stiff spines, pink flowers.....1 in. S 25c

Mam. trichacantha. Globular hooked spined plant with red flowers.....1 in. S 25c

Mam. wagneriana. A new globular, milky species that is remarkable for its very long spines.....1 ½ in. S 50c

Mam. wildii. Forms clusters of globular heads, white and yellow spines, many white flowers.....1 in. RC 35c, Grafted crests \$1.00

Mam. zuccariniana. Stout, tall plants bearing light colored spines, purple flowers.....1 in. S 25c

Mediolobivia. An excellent new group of small Rebutia like, weakly spined, freely clustering plants with large yellow flowers of the Lobivia type from northern Argentina.

Mediolobivia aureiflora. (Rebutia). Small, globular, freely clustering plants, very small spines, yellow flowers. Small grafted.....\$1.00

Mediolobivia duursmaiana. (Rebutia). Clustering, dark green plants tinted red, white bristly spines, orange flower. Small grafted.....\$1.00

Mediolobivia elegans. (Rebutia). Small globular, clustering heads, short spines, yellow flowers. Small grafted.....\$1.00

Neobesseya similis. Small clustering plants resembling Coryphanthas. Tan colored flowers with pointed petals followed by red fruit....Plants 25c, 35c

Neolloydia texensis. Clustering, cylindrical, spiny heads bearing pink flowers Plants.....25c, 35c, 50c

Neoporteria reichii. Clustering, globular heads with very short brown spines, yellow flowers with reddish outer petals. Small grafted.....\$1.00

Neoporteria senilis. Globular species with hairy spines, pink flowers. Small grafted\$1.00

Neoporteria subgibbosa. A splendid new plant from South America. Tall headed, dark green plants with light colored, short spines, yellow flowers.....1 in. S 25c, 2 in. 50c

Notocactus are a group of easily grown, bristly spined, free blooming globular kinds, mostly with yellow flowers. Br. & Rose included most of these South American gems with Malacocarpus.

Noto. apricus. Globular plants covered with weak golden brown spines, large, apricot colored flower.....1 ½ in. flowering P \$1.00, 2 in. P \$1.50

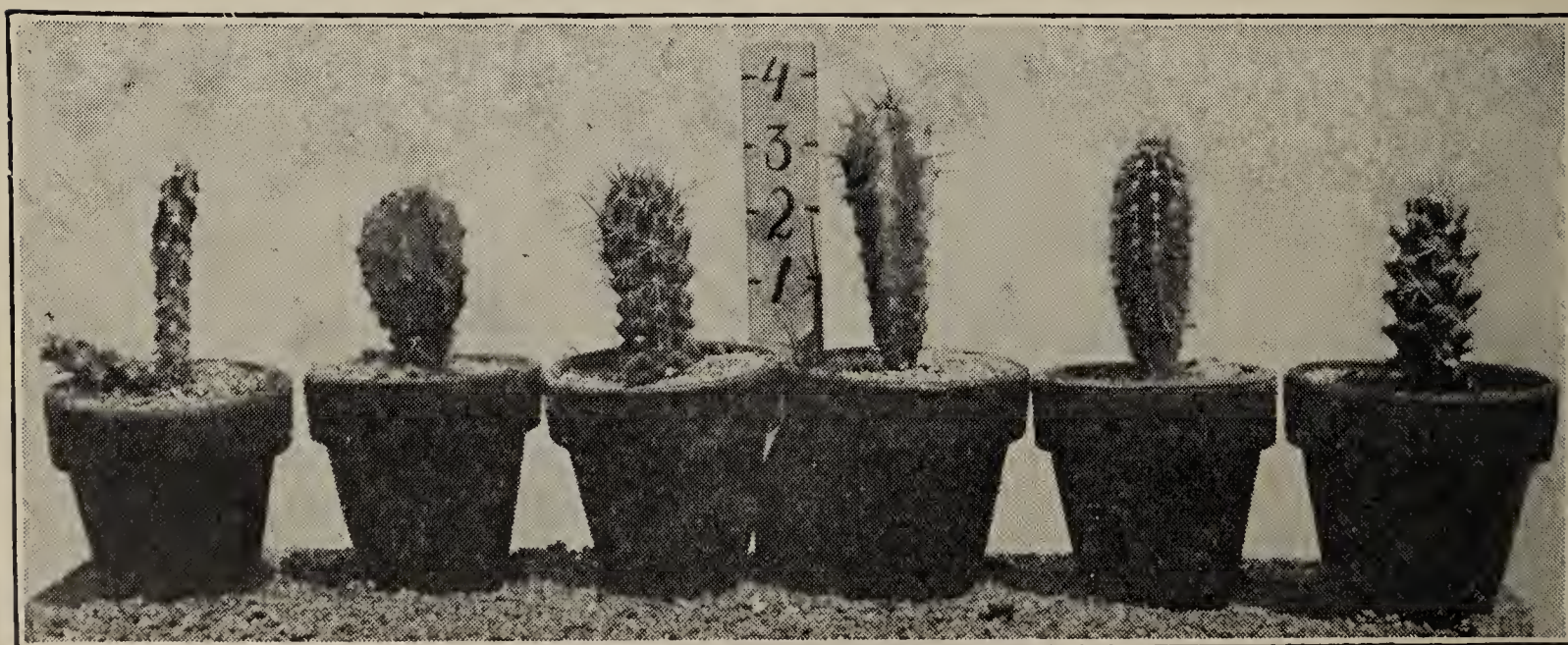
Noto. haselbergii. Small globular plants covered by creamy white almost hairy spines, red flowers. Small grafted P \$1.00, 1 ¼ in. P \$1.00.

Noto. ottonis. Fine globular plants, short brown spines, beautiful large yellow flowers. Small grafted 50c, 2 in. "blooming" P \$1.25, 2 ½ in. crested clusters \$2.50, small grafted crests 75c.

Noto. scopa. Beautiful plants densely covered with short white spines. Small grafted crests.....75c

Parodia maasii. (Malaccarpus). Bright yellow green, globular plants bearing heavy, hooked, brown spines, orange flowers.....1 ¼ in. S 50c

Phellosperma tetrancistra. Clustered heads white spines intermixed with dark hooked ones, large pink flowers.



Seedlings of various tall growing types.

The West's most beautiful Mamillaria, but very hard to grow. Likes coarse limey soil, little water.....
.....Plants 25c, 35c, 50c

Pyrrhocactus strausianus. Another fine small member of the South American Echinocactae. Small heads, short light spines, pink flowers. Small grafted....
.....\$1.00

Rebutias are easily grown little gems from the high lands of South America. In size, they are comparable to small Mamillarias. Their short, harmless, light colored spines lie close to the plant bodies. Freely produced large, bright flowers curve up from near the base of the plants.

Reb. fiebrigii. One of the very best with scarlet flowers. Small seedlings 25c. Small grafted ready in August 75c.

Reb. grandiflora. Another very small plant with a beautiful large flower. Small grafted.....75c

Reb miniscula. Forms clusters of globular, deep green heads with depressed, short, whitish spines, beautiful scarlet flowers and fruits. Small RC 25c, small grafted.....75c

Reb. pseudodeminuta. A freely clustering beauty bearing golden flowers. Small grafted.....75c

Reb. senilis. A rare and beautiful hairy spined variety with red flowers. Small grafted\$1.00

Reb. senilis var. **brevisetia.** Globular with short bristly spines. Small grafted.....
....., \$1.00

Reb. senilis var. **stumeriana...** Small grafted..... \$1.00

Reb. xanthocarpa var. **citrocarpa.** One of the easiest to grow and very satisfactory. Freely clustering light spined heads bearing red flowers. Small grafted.....75c

Roseocactus fissuratus. (Ariocarpus, Anhalonium). The Living Rock Cactus. A curious small plant seemingly carved from gray stone in a most intricate pattern. Small pink to white flowers. Plant in coarse limey soil and water lightly. Plants 25c, 35c, 50c.

Solisia pseudo=pectinata. Very pretty, small, globular plants bearing very short white spines. Small grafted crests\$1.00

Thelocactus bicolor. (Echinocactus). Conical, stiffly spined heads, pink flowers with orange throats.....
.....1½ in. S 25c, 2¼ in. P 50c

Thelocactus hexadrophorus. Echinocactus). Globular heads, small depressed spines, purplish flowers....3 in. P \$2.00

MISCELLANEOUS CACTUS

Aporocactus are commonly called Rat Tails because of their long pendant branches and are famous for their abundance of bright flowers. Only the pink flowered Flagelliformis has been common in our collections. Two reds and another pink have recently been imported from Mexico.

A. conzattii, red.....Grafted 60c

A. flagelliformis, common pink, RC 15c 25c. Grafted 50c.

A. flagiformis, red.....Grafted 60c

A. leptophis, pink.....Grafted 60c

Chamaecereus sylvestrii. The Peanut Cactus so-called from its short plump branches which form compact clusters and produce an amazing number of scarlet flowers. Plants 15c, 25c, 35c

Epiphyllopsis gartnerii. (Schlumbergera). The Easter Cactus. The drooping, flat, segmented branches carry an abundance of bright scarlet flowers in the spring. Grows best in partial shade. Grafted on standards.....75c

Heliocereus speciosus. Sun Cereus. Produces an abundance of triangular branches on whose notched margins enormous, iridescent red blossoms are borne.....RC 50c

Peniocereus johnstonii. Low. Calif. Long angular branches, short spines, large white, nocturnal flowers. Rare. Small grafted.....75c

Pereskia pereskia. The Orange Leaf Cactus. Called by evolutionists, "The Mother of Cactus." A slender, wiry branched, climbing cactus bearing hooked thorns, large, persistent glossy leaves, pale pink flowers. A favorite grafting stock.....RC 25c, Plants 50c

Phyllocactus. (Epiphyllum). These plants are native to moist tropical forests where they grow on tree trunks like orchids. They prefer a soil rich in humus, plenty of water and some shade. They are excellent to grow with ferns and begonias. The branches of most kinds are blade like with spineless, notched edges. The flowers are large and beautiful. Most kinds are day bloomers.

Phyllo. ackermannii. Brilliant crimson flowers from four to six inches across.
.....RC 35c

Phyllo. anguliger. Very interesting because of the great depth of the notches on its spineless edges. White flower
.....RC 50c

Phyllo. crenatum. Flat spineless branches, large creamy white flowers.....RC 35c



Mr. Grahl plants them out after the winter in a New Jersey cellar greenhouse

- Phyllo. German Empress.** Flat, green, spineless drooping branches bearing numerous medium sized flowers of a beautiful clear pink.....RC 35c
- Phyllo. peacockii.** Triangular branches, brilliant red flowers.....RC 35c
- Phyllo. pittierii.** Flat branches, white flower.....RC 50c
- Phyllo. stenopetalum.** Large flat branches borne on long round stems, white flowers.....RC 35c
- Schlumbergera russelliana.** A Christmas Cactus. The drooping branches of this plant are nearly hidden by pink flowers in the winter. Likes shade.....RC 25c, P 35c
- Zygocactus truncatus.** A Christmas Cactus. Small, flat, segmented branches, pink flowers.....P 25c
- Zygocactus salmonium.** Crab's Claw Cactus. Drooping, flat segmented branches bearing numerous salmon pink flowers in the fall. Grow in shade. Grafted on standards.....75c
- Wlicoxia.** The Lead Pencil Cactus from its round, slender branches. These plants form clusters of tubers when grown on their own roots. They grow much better and flower freely when

grafted. They should be severely cut back several times to induce the formation of many branches. All like some shade as they naturally grow up through bushes.

- W. australis.** A rare new species from Sonora. Slender, very fine spined green branches, many magnificent pink flowers.....Grafted 75c
- W. poselgeri.** (Cereus tuberosus). The Dahlia Cactus. Slender branches covered with short gray to brown interlaced spines, pink flowers.....Grafted 50c
- W. schmollii.** (W. senilis). A very striking new species covered with short, white hair, pink flowers.....Grafted 50c
- W. striata.** (Cereus striatus, diguettii). Harramatraca. Very slender, striped branches bearing minute brown spines, magenta flowers, red fruits.....Grafted 50c
- W. viperina** (C. viperinus). Slender, minutely spined branches, red flowers. Small plants 50c, Grafted 50.

THE OPUNTIA TRIBE

Opuntias form a very large section of the Cactus Family. They are usually large and quick growing plants. Some have flat joints or pads and this group is called "Prickly Pear," "Tuna" or "Platyopuntia." Tree-like types with round cylindric branches are called "Cylindropuntias," "Chollas" (Choy-yahs), "Jumping Cactus" and "Cane Cactus." There are also minor groups of creeping, clustered and small, woody, branching types.

- Grusonia.** This is a subdivision of the Opuntia Tribe. They resemble the Cylindropuntias except that the spine clusters are borne on ribs instead of separate prominences called tubercles. Until we began our Lower California explorations only G. bradtiana was known.
- G. hamiltoniae.** (Gates in lit.). Low. Calif. Discovered on our 1934 Mexican trip. To be named for Miss Hattie Hamilton who lives in a house by the side of the road in Lower California and is a friend of the traveler. Dark green branches with widely separated clusters of dark, heavy, sheathed spines.....RC 35c
- G. rosarica.** (Gates in lit.). Lower Calif. Our discovery in 1934. Named for the nearby village of Rosario. An excellent kind freely bearing clusters of fine brown spines, pink flowers..RC 35c

- G. santa maria.** (Baxter) Low. Calif. One of our discoveries on Magdalena Island. Branches are thickly covered with very sharp, sheathed, purple spines, pink flowers.....RC 35c
- Nopalea cochinilifera.** Erect plants with large smooth, spineless pads. In the Canary Islands, Cochineal Bugs are grown on these plants to provide harmless dyes for lip stick.....RC 25c
- Nopalea dejecta.** Erect plants with large drooping green pads bearing long white spines.....RC 25c
- Opuntia alcahes.** Low. Calif. A very pretty Cholla bearing numerous white spines of a deceptive soft appearance.....RC 25c
- O. arbuscula.** Compact, bushy plants with round slender joints....RC 15c, 25c
- O. aurea.** (Baxter 1933). A new hardy species from Southern Utah. A small plant of the Basilaris group bearing yellow glochids and yellow flowers....RC 25c
- O. basilaris.** The Beaver Tail Cactus. Rose Tuna. Smooth, purplish, clustering pads, very fine, short glochids, large magenta flower. Hardy....RC 15c, 25c
- O. brachyclada.** A fine dwarf form of O. basilaris with small spineless pads and purple flowers. Quite hardy and very easily grown.....RC 15c, 25c
- O. brasiliensis.** Forms tree shaped plants bearing glossy green pads, yellow flowers. Fine tub plant.....RC 15c, 25c
- O. bravoana.** (Baxter 1933). Low. Calif. Beautiful smooth green pads bearing white spines, large yellow flowers.....RC 50c
- O. burrageana.** Low. Calif. Rather slender branches covered with short yellow to brown spines. Very pretty.....RC 25c
- O. calmalliana.** Low. Calif. A slender branched, sparsely spined Cholla.....RC 25c
- O. cholla.** Low. Calif. Tree like Cholla bearing whorls of fat, turgid green branches with widely spaced spines, purple flowers, green proliferous fruit.....RC 25c
- O. ciribe.** Low. Calif. A Cholla with fat, green, upcurved branches bearing numerous white spines, greenish yellow flowers, yellow tubercled fruit.....RC 25c
- O. clavellina.** Low. Calif. A striking long jointed Cholla with very long, bright spines, bronze flowers.....RC 35c
- O. comoduensis.** Low. Calif. A flat jointed species with softly pubescent pads and white or yellow spines.....RC 50c
- O. cylindrica.** Plump, round, green branches, red flower, green fruit.....RC 25c
- O. decumbens.** Small plants, smooth green pads with scattered clusters of yellow glochids bordered by white wool and surrounded by a purple spot.....RC 35c
- O. elata elongata.** The Orange Tuna. A small plant with flat, spineless pads and many orange flowers.....RC 25c
- O. erinacea.** A Grizzly Bear. Flat pads covered with weak, whitish spines, yellow flowers. Hardy.....3 in. S. 25c
- O. flaccosa.** A small clustering species covered with white hair from South America. Quite hardy.....RC 50c
- O. invicta.** The Rat's Nest. Low. Calif. Clusters of short, fat heads bearing heavy flat, gray spines, yellow flowers and fruits.....S 25c, 35c, 50c
- O. lagunae.** (Baxter). Gates No. 136. Low. Calif. A beautiful new blue padded species from the high mountains of the Cape District Long white spines, maroon fruit.....RC 50c
- O. leptocaulis.** A miniature tree with many small branches bearing rose pink fruits.....RC 15c
- O. lurida cristata.** (O. mamillata?) The Boxing Glove Cactus. Forms crested branches resembling clenched boxing gloves. Very interesting.....RC 25c

Visit our
Garden Exhibit
 at the
**California Pacific
 International
 Exposition**
 San Diego

**It's a worth while display in
 a beautiful setting.**

OPEN ALL SUMMER

1936

- O. macrocalyx.** Small, light green, spineless pads bearing white glochids, yellow flowers, red fruits.....RC 25c
- O. margaritana.** Low. Calif. A flat jointed species bearing brown to purple spines and glochids, yellow flower.....RC 50c
- O. microdasys.** The Kid Glove Cactus. Small pads densely covered with fine yellow glochids. One of the prettiest and very easy to grow.....RC 15c, 25c
- O. molesta.** Low. Calif. A slender branched, well spined Cholla....RC 25c
- O. moniliformis.** An attractive species with small spined, paddle shaped joints.....RC 50c
- O. monacantha variegata.** Thin flat pads beautifully variegated in white, pink, green and yellow.....RC 15c, 25c, 35c
- O. opuntia.** Small, round, smooth pads, large yellow flowers. Hardy....RC 25c
- O. pycnantha.** An interesting species from the wind swept sands of Magdalena Island, Low. Calif. Fat joints nearly hidden by reflexed, fine yellow or brown spines.....RC 50c
- O. ramosissima.** Small, woody, much branched, low plants.....RC 35c
- O. rufida.** The Red Kid Glove Cactus. Thin pads bearing many clusters of short red glochids.....RC 25c
- O. salmiana.** South America. Slender, round, tapering branches, often tinted red, bearing yellow flowers followed by red fruits.....RC 25c
- O. santa rita.** Round, blue pads, sparsely spined, yellow flowers. Hardy RC 35c
- O. serpentina variety.** Low. Calif. An attractive green jointed Cholla with brown spines yellow flowers....RC 25c
- O. spinosior.** An attractive short spined tree Cholla, purple flowers..RC 15c, 25c
- O. subulata.** Large tree shaped, branching plant bearing persistent, round, long leaves.....RC 25c, 35c
- O. tesajo.** Low. Calif. A rare, low bushy, woody plant of the Ramosissima group, yellow flowers.....RC 25c
- O. treleasii.** One of the Basilaris group bearing clusters of long bristles.....RC 25c
- O. ursina.** The Grizzly Bear Cactus. The flat pads bear long, hairy, white spines, pink flowers. Very hardy..RC 25c, 35c
- O. whitneyana var. albiflora.** (O. minima). (Baxter). The white flowered Opuntia basilaris. Smaller and daintier than the pink flowered.....RC 25c
- O. zebrina.** Smooth, green pads bearing long spines banded with yellow and brown.....RC 25c
- O. Gates No. 95.** Low. Calif. Whiplike branches that clamber up through other bushes. Bears scarlet fruits of the Leptocaulis group.....RC 25c



Howard Gates in our 1935 exhibit at the San Diego Exposition. The 1936 exhibit, which is on the walk to the Palace of Transportation, is much larger and better.

- O. Gates No. 133.** Low. Calif. A Cholla with short, turgid joints, very short spines, bronzy green flowers. Very interesting.....RC 25c
- O. species.** A new one from Sonora. Has slender, round green branches bearing spines and quite persistent, long, round leaves.....RC 25c
- Perekiopsis chapistle.** A heavy caned, shrubby plant, large leaves. Attractive.....RC 25c
- Perekiopsis gatesii.** (Baxter 1932). Low. Calif. One of our discoveries. A vining plant bearing thick, glossy leaves, golden yellow flowers shaped like wild roses, rose pink fruits.....RC 25c
- Perekiopsis porterii.** Vining plant with green leaves, large yellow flowers, long, orange fruits.....RC 25c

MISCELLANEOUS SUCCULENT PLANTS

Agave or Century Plants are one of the crowning glories of Lower California. We list many of the twenty-five species from there. Most of them are exceedingly rare. The heights indicate the probable height of the leaves under cultivation.

- A. affinis.** Low. Calif. Very rare. Gray green, re-curved leaves. 3 feet.....Offsets 50c
- A. brandegeei.** Low. Calif. Gray green out curved leaves with contrasting medium sized teeth. 3½ feet. Very good. Offsets 50c, Plants 75c, \$1.00.
- A. cerulata.** Low. Calif. A small species with gray green leaves, recurved at tips 1½ feet. Offsets 35c, 50c.
- A. connochaetodon.** Low. Calif. The Gnu Toothed Agave. A little blue beauty. Short, thick, triangular leaves edged with curiously twisted, large teeth and tipped with short heavy spines. 1 foot. Offsets50c
- A. datylio.** Low. Calif. Rather slender, dark green dagger like leaves with small dark teeth. 2½ feet. Offsets 50c. Plants 75c, \$1.00.
- A. Gates No. 231.** Low. Calif. New slender, dark green, tapering leaves with small brown teeth 4 feet....Offsets 50c, 75c
- A. margaritae.** Low. Calif. Dwarf plants with very thick, triangular, green leaves edged with heavy brown teeth. 1 foot. A fine pot plant.....Offsets 50c
- A. nelsonii.** Low. Calif. A gray green plant of the Desertii group. 2 feet. Offsets 35c, 50c. Plants 75c, \$1.00
- A. orcuttiana.** Low. Calif. A compact plant with heavy dark green leaves. 3 feet.....3 in. S 25c

A. roseana. Low. Calif. A beauty, bearing widely spreading gray green leaves with distantly spaced large teeth and long terminal spines. 2½ feet. Offsets 50c.

A. sebastiana. Low. Calif. Dark green leaves, large teeth, long spine. 3 feet.3 in. S 25c

A. toumeyii. A dwarf variegated variety from Arizona. New. Hardy..3 in. P 25c

A. utahensis. A dwarf gray green variety with long, wavy, terminal spines. 1 foot. Hardy. Small plants 25c, 35c.

Aloe variegata. The Partridge Breast Aloe. Small, angular, stiff leaves marked by horizontal bars of white and blue green.....2 in. P 35c

Dudleya. Native plants of California and Lower California that are quite similar in appearance to Echeverias (Hen and Chickens). Their leaves are more pointed, varying greatly in size and color. In California they will flourish in the winter and spring, curl up and rest in the summer. Valuable as rockery and pot plants. Do not like to be grown where water will drip on them. We have a few plants each of a large number of rare species, both named and unnamed from Low. Calif. at 50c each.

Dudleya abramsii. A rare but easily grown tiny species forming rosettes three inches across with gray green pointed leaves, yellow flowers.....Plants 25c

Hechtia species. A clustering Bromeliad from the tip of Low. Calif. Gray green with red silver and red markings. Smaller than H. Texensis.....Plants 50c, \$1.00

Hechtia texensis. Long, thin, recurved, gray green leaves marked with dark red markings and bearing hooked teeth on the margins.....Offsets 25c

Gasteria retata. The Hart's Tongue. Fleshy, smooth, speckled tongue shaped leaves extending in two directions only. Small P 25c, Specimen P \$1.00

Pedilanthus macrocarpus. A Euphorbia Curious plants composed of clustering gray green, rod like, leafless branches springing from the ground. Height to three feet.....RC 35c, 50c

Styllophyllum virens. Rosettes of deep green glossy leaves from San Clemente Is., Calif. Good rockery plant.....Plants 35c

Yucca species. A new one from Low. Calif., apparently related to Y. whipplei. Slender, gray green, pointed leaves from a crown.....S 25c



FIRST PRIZE WINDOW GARDEN PICTURE

Mrs. Harry Lewis of Washington, finds very great pleasure in several fine window gardens arranged as in this picture. You too, can share in this pleasure. All that is needed is a very small space in a light room.

Cactus are un-excelled as house plants. They grow easily, they do not take up much room and will live through the family vacations without water or care. Their forms are fascinating, their colorful spines intriguing and their flowers beautiful.

One of our collections as offered on the next page will give a fine start toward real pleasure in a new and fascinating hobby. Why not get one now?

We have no wholesale list this year

HOWARD E. GATES
FAMOUS CACTUS GARDENS
119 S. ILLINOIS STREET
ANAHEIM, CALIFORNIA

May 5, 1836.

Dear Friends:

We must apologize to many, as you asked for our catalogue long ago. We expected to have it mailed out by March 15, but owing to difficulties with a dilatory printer, which resulted in our giving the work to another, were not able to get it completed until the present time.

Unfortunate as this was, it has worked out to an advantage, as in the meantime the federal government has released for sale hundreds of plants that we imported last year. We are offering many things we believe have never been listed in an American catalogue.

Also the catalogue will arrive at the most opportune time of the year. Cactus plants may be started at any time, provided the proper heat, light and moisture are supplied. However, at this season, Mother Nature gives us the biggest boost and the plants strike root very quickly, with all summer to develop in.

If you are one of those who have never experienced the pleasures of cactus culture, we recommend the purchase of one of our collection offers. Just say that you are a beginner and we will see that all are easily grown.

Very truly yours,

HOWARD E. GATES.

P. S. Don't forget the Eighth Annual Show of the Cactus & Succulent Society of America, at Paul J. Howard's Flowerland, Third and La Brea, Los Angeles, May 14 to 17. It's the best ever.

HOWARD E. GATES' FAMOUS CACTUS GARDEN

Anaheim, California

Date.....

Please write plainly.

STAMPS

2½ % Sales Tax to comply with the State Law.

QUANTITY	ARTICLE WANTED	DOLLARS	CENTS
AMOUNT FORWARDED TO BACK OF SHEET			

ORDER BLANK

[illegible]

One years' membership fees in the Cactus & Succulent Society of America
including subscription to its illustrated monthly Journal \$3.00

1 year subscription to Desert Plant Life Magazine	\$1.50
--	--------

TOTAL

Plus sales tax of 2½ % for California customers only

It will be a pleasure to send our catalogue to any friends you may list below. Please write **plainly**.

1911

CACTUS COLLECTIONS

Every one of our collections is a good buy. There is no junk in any of them. Every one gives greater value than when the plants are ordered separately. Plants to be included are those of our own choice and equal in quality to those catalogued. Postage is prepaid on all of them. When several collections are ordered at one time we will avoid duplication of varieties. In case you do not wish a variety we might include, mention it and we will select another. When ordering simply list on the order blank the name of the collection and its price in this manner:

- 1 Flowering Cactus collection.....\$2.00
- 1 Beginner's collection.....\$5.00

FLOWERING CACTUS COLLECTION

An assortment selected because of their wonderful flowers. Get one of these and you will be a cactus fan for life. Such beauties as Echinopsis, Chamaecereus and Echinocereus. No night bloomers.....9 Plants, all for \$2.00

BEGINNER'S COLLECTION

For those who have not had much experience in growing cactus, we offer this big value collection. It is a choice assortment of strong, healthy plants in a wide range of easily grown types that will make the foundation for a fine collection.

10 Plants \$2.00 25 Plants \$5.00 52 Plants \$10.00

HOUSE PLANT COLLECTION

A fine assortment of good varieties in various types especially chosen for growing in the house. Includes one grafted plant.....25 Plants \$5.00

SOUTH AMERICAN COLLECTION

A choice collection of 5 fine plants all hailing from South Panama, \$1.00.

LITTLE CACTUS COLLECTION

Precious little gems suitable for that south window garden. Mammillarias, Coryphanthas and other small types.

5 Plants \$1.00 13 Cactus beauties \$2.50 27 Little gems \$5.00

CEREUS COLLECTION

A group of large branching or columnar cereus types. 5 Plants for \$1.00. 10 Plants, including one 4-inch Pachycereus pringlei, for \$2.00.

NIGHT BLOOMING CEREUS COLLECTION

These plants will give many gigantic, sweet smelling blossoms that open as the shades of night fall. Easily grown in the home. 5 Plants for \$1.00.

LOWER CALIFORNIA COLLECTION

A choice group for your own garden. An excellent gift for your fancier friends. No Opuntias except Invicta. 8 Choice Seedlings \$2.00. 20 Choice Seedlings and propagations including one grafted Echinocereus sciurus, \$5.00.

LOWER CALIFORNIA OPUNTIA COLLECTION

5 Strong rooted cuttings of these rare plants for \$1.00.

MEXICAN COLLECTION

Mexico, one of the world's greatest cactus districts sent us these interesting beauties. Includes the Old Man. 7 plants for \$1.50.

OPUNTIA COLLECTION

An interesting and easily grown group. We will include the famous white haired Grizzly Bear. 5 fine plants for \$1.00.

POKON CACTUS FERTILIZER

A soluble, odorless, stainless and easily applied fertilizer that makes cactus and succulents grow. 90 gram bottle \$0.50, 500 gram \$2.00, 1000 gram \$3.50.

HOW TO GET TO HOWARD E. GATES' FAMOUS CACTUS GARDENS

From Los Angeles or San Diego take U.S.-CALIF. Highway No. 101 to Anaheim. West on Center to Illinois Street, left 200 feet. From Inglewood and Santa Monica Bay District follow Manchester-Firestone Blvd. to crossing of Lincoln Ave., turn left one-half mile to Illinois St., right 200 feet. From Long Beach, north on any through street to Carson Blvd. (called Lincoln in Orange County) east to the junction with Center Street, right 200 feet. From Pomona, Ontario, Covina, etc., Brea Canyon road through Brea and Fullerton to Anaheim, west on Center St. to Illinois St. From San Bernardino, Redlands, Riverside via Santa Ana Canyon Highway to Olive, right to Anaheim, west on Center St. to Illinois St.

CACTUS & SUCCULENT JOURNAL OF AMERICA

The best English language periodical on this class of plants is the Journal of the Cactus & Succulent Society of America. It is a monthly magazine containing a varied list of interesting articles, beautifully illustrated. The subscription price includes membership in the Cactus & Succulent Society of America which has numerous local affiliated Societies operating both a Service Bureau to assist affiliates and a Plant Identification Service for the benefit of its members. We will be glad to handle your subscription without profit to ourselves. Either United States or Foreign \$3.00 per year.

DESERT PLANT LIFE MAGAZINE

This is a snappy, informal monthly magazine, well illustrated, telling of the desert and its plant life. It fills a niche that no other publication fills. It will interest you. It is published by The Desert Publishing Co. at \$1.50 per year and we would be delighted to handle your subscription order.

THE OPUNTIA BOOK

Volume One of the Cactus and Succulent Society of America's reprint of "Cactaceae" by the late Messrs. Britton & Rose is now bound and ready for distribution. This exhaustive and authoritative work covers the Pereskias, Pereskopsis and Opuntias. It gives the names, synonyms, description and many notes on the various species as well as a multitude of handsome illustrations. There are only a hundred copies to be sold. They will soon be gone. Order now from us. The price is \$10.00 post paid.

WINDOW GARDEN PICTURES

We wish some good pictures of indoor cactus window gardens, suitable for publication. We will offer plant orders for the best pictures received by October 1, 1936, as follows: First award, \$25; Second, \$15; Third, \$7.50.

CACTUS PLANT PICTURES

Help us provide good pictures for our next catalogue. Send us prints of your cactus pictures. Next October we will send plant orders as follows: First award, \$10.00; Second, \$7.50; Third, \$5.00. For any others we may wish to keep, \$2.50.

In return for awards under either of the above offers we expect the sole right to copyright and publish such pictures as we may select.

HARDY CACTUS PLANTS

These plants grow naturally where the winters are very cold. We cannot promise success with them in any given locality owing to various soil and moisture conditions. They are worth trying where hardy plants are desired. Echinocereus coccineus, engelmannii, mojavensis, perbellus, rosei, viridiflorus; Ferocactus acanthodes; Coryphantha neo-mexicana, vivipara; Neobesseya similis; Opuntia aurea, basilaris, opuntia, santa rita, spinosior, ursina, whitneyana.

DO YOU KNOW

That Howard E. Gates' Famous Cactus Gardens is the only firm in the United States that devotes over 95% of its time to the culture and propagation of cactus? Our cactus business is not a side line. You will be pleased if you buy from Gates.